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| 09/498,789   | 02/05/2000  | Natarajan Ramachandran | D-1096 CIP          | 9304             |
| 28995  | 7590        | 09/13/2004             | EXAMINER            |                  |
| RALPH E. JOCKE<br>231 SOUTH BROADWAY<br>MEDINA, OH 44256 |             |                        | NGUYEN, CUONG H     |                  |
|  |             |                        | ART UNIT            | PAPER NUMBER     |
|  |             |                        | 3625                |                  |
| DATE MAILED: 09/13/2004                                  |             |                        |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/498,789

Applicant(s)

RAMACHANDRAN ET AL.

Examiner

CUONG H. NGUYEN

Art Unit

3625



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17, 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 18-24 and 27-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### Status of the Claims

1. Claims 1-35 are pending in this application. The examiner withdraws the Final Office Action mailed on 1/29/2003 due to the Quality Assurance Specialist 's advices; the restriction requirement mailed on 4/21/2004 is vacated.

### Drawings

2. This application has been filed with 36 sheets of drawings which currently are acceptable for examining purposes.

### Remark

3. Some claims only require one of voice or image feature for verification, and then also allows manual input for authorization (e.g., a PIN or a password; i.e., claims 29-32). It is also well-known for different store clerks to log on to or enter passwords for cash registers or point-of-sale terminals (here, different sales clerks would represent different "merchant users"). A well-known technique for authorization is receiving an input password and compare said password against a stored database (e.g., US Pat. 5,790,674); further, it is well-known to combine both PIN and biometric inputs for authorization (e.g., voice, iris, finger print, sensing an appearance .etc. depending on " a need" for a degree of authorization/verification, see US Pats. 5,655,007 or 4,876,717). As a result, it would have

been obvious to modify the typical password type clerk authorization to add voice verification depending on a level of verification/authorization - this strategy could be used with the claims that only recite one of audio or video.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18-23, 27-29, 30-32 are rejected under 35 U.S.C.

§103(a) as being unpatentable over Lipkin (US Pat.

5,592,377), in view of Atkins (US Pat. 5,644,727).

A. Lipkin suggests a system comprising:

- A financial transaction machine/(an automated check cashing system)/method including an imaging device (see Lipkin, Fig.1, camera 28 (for sensing a user's physical feature)/customer identification module 36, a check identification and storage module 42), an audio input/output (i.e., for pending claims 27-28) (see Lipkin, Fig.1, a handset 26), and a transaction function device (see Lipkin, a cash dispenser 44, a receipt dispenser 46 in Fig.1), whereby a user adjacent to the machine causes image input signals to be generated and the voice of the user causes audio input signals to be generated (see Lipkin, Fig.1

ref.16, and the abstract). Lipkin meets 2 requirements for resolving user's identity data in claims 27-28.

- a processor being in operative connection with the imaging/(suppressed imaging) device (see Lipkin, CPU 116), the audio/(suppressed audio) - this is similar to a claimed characteristic input device (i.e., for **pending claim 30** - only image OR audio signal is required for authorization/verification; therefore, Lipkin meets that requirement), and the transaction function device (see Lipkin Fig.1 refs. 26 (including a speaker - further, it is quite obvious with one in the art for controlling/suppressing volumes/audio signals (i.e., for **pending claim 29** - only image OR audio signal is required for authorization/verification; therefore, Lipkin meets that requirement), a video monitor 32 and a cash dispenser 44), the processor also being in operative connection to a data store, wherein the data store includes data corresponding to a user, the user data including identity data (see Lipkin, 4:52-67) corresponding to the user, image data corresponding to an appearance feature of the user (see Atkins - camera 28/customer identification module 36, a check identification and storage module 42, and voice data corresponding to a voice feature of the user (see Lipkin, 4:38-43, and claims 1-4, 9).
- a screen display (see Lipkin Fig.1 ref.30/32);

- a card reader including in the apparatus for manually actuating input device is quite obvious with Lipkin's disclosure (see Lipkin Fig.2 refs.76, 78; the examiner submits that when a customer inserts an ATM card into a card reader at a bank, the ATM machine manually actuating that ATM input device from sensing a card is inserted);

As to claim 18, Lipkin suggests about using a characteristic input device (e.g., a camera) and/or a manual input device (a keypad to enter a PIN) to get access.

As to claim 31, Lipkin suggests about using a characteristic input device (e.g., a camera) to get access.

As to claim 32, Lipkin suggests about using a voice/audio input device to get access.

- an audio output, wherein the output device prompts a user through audio message - a voice command from a machine is well-known (i.e., for **pending claims 22, 27**) (see Lipkin Fig.1 for an audio handset 26);

- a user data including account data, wherein the machine readable check/card includes account identifying data corresponding to an account associated with the user of the check/card, and wherein the check/card reader provides check/card input signals responsive to reading the check/card, and wherein the processor is operative to resolve the account of the user responsive to the account identifying data (see Lipkin Figs. 2-3 refs. 68, 70, 156);

- a keypad for inputting a user's code (e.g., PIN), then the processor will make a verification (see Lipkin Fig.3 ref 148, it's old and well-known to place a keypad at a customer station as a means for inputs at an ATM);

- a currency dispenser (i.e., a sheet opening on a merchant's side) (see Lipkin, Fig.2 ref.44);

- a ticket dispenser (i.e., a sheet opening on a customer's side) (see Lipkin, Fig.2 ref.46 for dispensing a receipt/statement/ticket);

Lipkin doesn't expressly disclose that a processor can compare/identify user's data (audio & visual inputs) for a level of correlation to enable transaction function devices.

However, Lipkin teaches an operator is used for such task, and means are provided for enabling the operator to verify the identity of the customer/user (see Lipkin, the abstract).

Atkins (Figs. 14B, 14C) also teaches similar identifications in transaction procedures that acquiring video prints and voice-prints to verify/compare obtained input data with stored data for a level of correlation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to implement Atkins, in an application of Lipkin in financial transaction because these combined ideas for input data verifications would increase a level of accuracy in

identifying user and giving numerous advantage to users in financial transactions.

4.B. As per claim 23: The rationales, and references for an obvious rejection of claims 18 are incorporated herein.

Lipkin discloses a monitoring device (see Lipkin, Fig.1, ref.28); it is well-known that this device has been used to sense a user in a proximity in order to electronically enable/disable a transaction machine (a camera, a sensor .etc. would be used for activating other circuits, i.e. a processor, a storage device .etc.).

4.C. Regarding claim 21: The references and rationales for 35 USC 103(a) rejection of claim 20 are incorporated.

a) As to claim 21, Lipkin also discloses a keypad for input communications from a user (see Lipkin, Fig.3 - ref.148).

4.D. As per claims 19, 20, 27: The references and rationales for rejections of claim 18 are incorporated herein.

Lipkin also discloses an output device, a display, and a video data storage (see Lipkin, Figs.1,3 refs. 26/28/30/32/156), and it is well-known that an ATM with user data includes user preference data (e.g., an ATM user can select options: transfer money, account statements, cash withdrawal .etc.), and wherein the data store further includes product offering data, wherein the product offering



data is representative of products available for purchase (e.g., ATM services), and wherein the processor is operative to select product offerings from the product offering data in the data store responsive to the user preference data corresponding to the user, and to operate the output device to provide outputs corresponding to the selected product offerings (e.g., transfer money, account statements, cash withdrawal .etc. at ATM machines).

5. Claim 24 is rejected under 35 U.S.C. §103(a) as being unpatentable over Lipkin (US Pat. 5,592,377), in view of Atkins (US Pat. 5,644,727), and further in view of Lemelson (US Pat. 4,471,343).

The references and rationales for 35 USC 103(a) rejection of claim 23 are incorporated.

Atkins also discloses a processor capable to select and storing feature data (see Atkins, Fig.2 - ref. 35).

Lipkin and Atkins do not explicitly disclose about a selection of a suppression device to stored feature data concerning the merchant user in the data store.

However, Lemelson suggests similar feature of ceasing a proximity sense function (see Lemelson 7:62 to 8:14), wherein a comparator becomes energized to enable or disable the operation of a control circuit, merely upon receipt of a signal from comparator to switch open and prevent a

proximity detector from activating at the presence of a person by a proximity sensing detector.

The examiner submits that by programming operating software of an ATM machine, that machine can prevent ceasing operation of proximity sensing (written software to execute/activate an electronic circuit to turn ON/OFF a particular function is fundamental to computer programmers).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Lipkin, Atkins, and Lemelson because these combined ideas for input data verifications would give a user to select a means for communication (voice/image - changing a volume of output voices) and giving numerous flexibilities to a user in financial transactions.

6. Claims 33-35 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lipkin (US Pat. 5,592,377), in view of Atkins (US Pat. 5,644,727).

A. As to claim 33: It claims that the apparatus according to claim 30 and further comprising:

- a housing, wherein said housing includes a first side corresponding to a user side and a second side corresponding to a different user side, a sheet inlet opening in said different user side of the housing; a second sheet outlet opening in said user side of said housing.

The references and rationales for 35 USC 103(a) rejection of claim 30 are incorporated.

It is old and well-known for an ATM machine structure to have:

- a housing, wherein that housing includes a first side corresponding to a user side and a second side corresponding to a different user side, a sheet inlet opening in said different user side of the housing (e.g., an ATM inlet for bank/merchant's putting cash into an ATM machine).
- a second sheet outlet opening in a user side of the housing (e.g., an outlet at a bank's ATM machine for customer's receiving an ATM transaction statement).

These limitations are not inventive concepts; they merely are a designer's choice to put up an apparatus as claimed.

B. As to claim **34**: It claims that the apparatus according to claim 33 and further comprising:

- a housing in supporting connection with the chest portion; a customer interface in supporting connection with the housing; and a merchant user interface in supporting connection with the housing.

The references and rationales for 35 USC 103(a) rejection of claim 33 are incorporated.

The examiner submits that it is old and well-known for an ATM machine structure to have:

- a housing in supporting connection with a chest portion;
- a customer interface in supporting connection with the housing (e.g., a keypad, a camera, a customer's ATM card reader device); and a merchant user interface (e.g., a keypad, a camera, for an ATM machine) in supporting connection/coupling with the housing.

C. As to claim 35: It claims that the apparatus according to claim 34 wherein said housing comprises a sheet storage area.

The references and rationales for 35 USC 103(a) rejection of claim 34 are incorporated.

It is old and well-known for an ATM machine physical structure to have a housing where transaction/paper forms are stored for customers' conveniences.

***Allowable Subject Matter & Reasons for Allowance***

7. Independent claims 1, 25-26, are patentable over the closest references of Lipkin (US Pat. 5,592,377), Atkins (US Pat. 5,644,727), Lemelson (US Pat. 4,471,343), because the combinations of these references do not anticipate nor fairly and reasonably teach a financial transaction machine, comprising:

- in a transaction machine having a customer side and a merchant user side, wherein each one of a plurality of merchant users are verified for stored identity data using appearance image, and/or audio signals (e.g., personal

voice) as second identity data on a merchant user side; and those identity data are compared with each other, or input identity data of each merchant are verified against stored data using a processor of said transaction machine for a level of correlation before said merchant user are granted to accessing said machine.

8. Independent claim 14 is patentable over the closest references of Lipkin (US Pat. 5,592,377), Atkins (US Pat. 5,644,727), Lemelson (US Pat. 4,471,343), because the combinations of these references do not anticipate nor fairly and reasonably teach a method of operation above financial transaction machine comprising:

- in a transaction machine having a customer side and a merchant user side, wherein each one of a plurality of merchant users are verified for stored identity data using appearance image, and/or audio signals (e.g., personal voice) as second identity data on a merchant user side; and those identity data are compared with each other, or input identity data of each merchant are verified against stored data using a processor of said transaction machine for a level of correlation before said merchant user are granted to accessing said machine.

9. Claims 2-13, 15-17 are allowed because they are dependent upon base claims 1, 14.

***Conclusion***

10. Claims 1-17, 25-26 are patentable.

Claims 18-24, 27-35 are rejected.

11. Note: The inventive concept is about a financial transaction machine having a customer side and a merchant user side wherein on the merchant user side, appearance image input signals of a merchant are obtained by an adjacent camera, and audio input signals (voice) of a merchant are obtained by a microphone to compare with stored data for correlated authentications before said merchant user can operate that financial transaction machine.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose number is 703-305-4553. The examiner can normally be reached on 7am-3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, JEFFREY A. SMITH can be reached on 703-308-3588. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7687.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.

*Cuong H. Nguyen*

*CHN*

CUONG H. NGUYEN  
Primary Examiner  
Art Unit 3625